Courseware Solutions

Janis Gershman
Mary Pat McDonald
Evannah Sakamoto
Graphics: riff raff

Phone & fax:
1-888-MATHVILLE

www.mathville.com
e-mail: marypat@mathville.com

Mathville™ Jungleway v. 1.0

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Getting started

Insert the CD-ROM into the CD-ROM drive.

Windows 3.x
a) Using the File Manager, click the CD-ROM drive icon and locate jungle3.exe (possibly in J_folder).
b) Double-click jungle3.exe to start.

Windows 95
a) Choose My Computer.
b) Choose the CD-ROM drive icon (and, if necessary, J_folder).
c) Double-click the Jungle icon to start.

Macintosh
a) Double-click the Jungleway CD icon to show the contents of the CD-ROM (and, if necessary, J_folder).
b) Double-click the Jungleway icon to start.

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Introducing Mathville™ Jungleway

Mathville Jungleway is part of the Mathville™ series of educational software, which is based upon the belief that EVERY student can enjoy developing and demonstrating their mathematical literacy within a supportive, mathematically rich environment. The Mathville series is used in thousands of schools and is recommended by many departments and boards of education. The programs are designed in accordance with the standards developed by the National Council of Teachers of Mathematics and adhere to the curriculum guidelines of many North American educational jurisdictions.

Structure & content

Mathville Jungleway is a virtual environment where children can discover a wide variety of highly motivating math activities. It is a non-linear, non-hierarchical program, and children are free to start or leave any of the games at any time. Each game requires the student to use specific math skills in order to score well or complete the game. The skills required by each game are listed beginning on page 8.

Suggested grade range

The topics in Mathville Jungleway are often introduced in grade 2 classrooms. Due to its structure, which allows children to freely explore a wide variety of activities and math skills, the program may be used in grades 1 to 3 and may be enjoyed by younger children as well.

Recommendations for use

Most children readily begin exploring Mathville Jungleway on their own, require little supervision and enjoy playing for 45 minutes or more. Students will often go through several Jungleway games fairly quickly and then settle on a favorite activity that they will concentrate on for a longer period of time. As students acquire new

skills or advance to higher grades, they will discover new Jungleway favorites.

The program is appropriate for use at any point during the school year and may be used as:

- a highly motivating way to reinforce and provide additional practice in math skills introduced in class
- a means of providing a wide variety of applications of math skills and concepts
- a source of assessment information about a student's problem-solving methods and styles and a diagnostic tool to determine areas of difficulty
- an enrichment activity for children who excel in math

Having small groups of two or three students use the program works well, creating a setting which encourages the development of communication skills and co-operative problem solving. See page 7 for additional tips for play.

Copying to a hard drive

Mathville Jungleway was developed to run directly from the CD-ROM. However, if you wish to copy it to a hard drive and run it, the following files and folders, which require about 25 MB, should be copied:

Windows 95

- *Jungle.exe*
- *DATA* folder

Macintosh

- *Jungleway*
- *Data* folder

Windows 3.x

- *Jungle3.exe*
- *DATA* folder/directory

Math Topics in Mathville Jungleway

Number Sense

Addition.....*Bubble Fish*
.....*Jungle Seesaw*
Division (as sharing).....*Pete's Treats*
Estimation.....*Bubble Fish*
.....*Bunch of Bugs*
Fractions .....*Pete's Treats*
Multiplication (with manipulatives) .....*Lots of Legs*
Number facts .....*Bubble Fish*
Number line.....*Bunch of Bugs*
Place value.....*Con-scene-tration*
.....*Jungle Seesaw*
Reading numerals & number words .....*Con-scene-tration*
.....*Harry, Larry, Mary*
.....*Lots of Legs*
.....*Pete's Treats*
Representing numbers in different ways .....*Con-scene-tration*
.....*Jungle Seesaw*
Rounding to the nearest 10 .....*Hummer Race*
Subtraction.....*Bubble Fish*
.....*Harry, Larry, Mary*
Skip counting by 2s, 5s & 10s.....*River Skip*
Strategies for 2-digit addition & subtraction .....*Bubble Fish*
Word problems .....*Harry, Larry, Mary*
.....*Lots of Legs*
.....*Order in the Jungle*
.....*Pete's Treats*
.....*Race Around the Field*

Geometry & Spatial Sense

Shape positioning words like left, right.....*Time Tracks*
.....*Order in the Jungle*
Three-dimensional objects.....*3-D Fly-by*
.....*Con-scene-tration*
Two-dimensional shapes.....*Con-scene-tration*
.....*Make a Shape*
Turns.....*Make a Shape*

Measurement

Comparing objects by height.....*Order in the Jungle*
Comparing objects by area .....*Make a Shape*
Ordering days, months.....*Time Tracks*
Measurement stories.....*Order in the Jungle*
.....*Race Around the Field*
Perimeter.....*Race Around the Field*
Time relationships.....*Con-scene-tration*

Patterns & Relations

Extending sound patterns.....*Finish the Symphony*
Identifying attributes in presorted sets .....*Bug Blast*
Skip counting.....*River Skip*
Sorting by attributes.....*Bug Blast*
Translating patterns from one mode to another .....*Finish the Symphony*

Data & Probability

Making predictions based on probability.....*Giraffe Graph*
Pictographs .....*Giraffe Graph*
Sorting, classifying objects by attributes.....*Bug Blast*

Problem Solving

Throughout the program

Mathville Jungleway Main Screen

- To play a Jungleway game, click one of the leaf-shaped icons. Each game's icon is shown on the following pages.
- To return to this main screen, click the Return to Jungleway button in each game.

- The Menu Bar across the top of the screen has two entries: File and Options. Click the pull-down File menu to:
  - Print Screen – this option is available at the end of each game to provide a printed record of achievement
  - Quit – to exit from the program Mathville Jungleway

Use the pull-down Options menu for:

- Credits – a list of the creators of Mathville Jungleway
- Help – context-sensitive audio advice on what to do
- Sound – to display the slider control that adjusts the sound volume

When finished with Credits or Sound, you'll probably want to close the window (click in the upper corner) to make it disappear.

These menus are of interest primarily to the teacher or supervising adult.

General Tips for Play

- It's probably best for an adult to start the program (see the back cover of this manual) and stop it (by choosing Quit from the pull-down File menu and ejecting the CD-ROM).
- Children generally discover a lot about Mathville Jungleway by following their natural inclinations to play and explore. Encourage children to answer their own "What do I do next?" or "How do I…"-type questions by looking at the screen and experimenting. Point out that trying as many things as they can think of and then seeing what happens is a good way to solve a problem.
- Having pairs of students work together on the program works well, providing a setting for cooperative play and problem-solving. One way of doing this is to set up a computer running Jungleway as a resource or activity centre.
- If a printer is available, you may wish to show students how to use the pull-down File menu to choose *Print Screen* and ask them to save the printouts as a way of tracking their achievements in the program.

3-D Fly-by

Math skills

- Identify and name three-dimensional geometric objects as cubes, spheres, cones, cylinders and pyramids.

Program icon

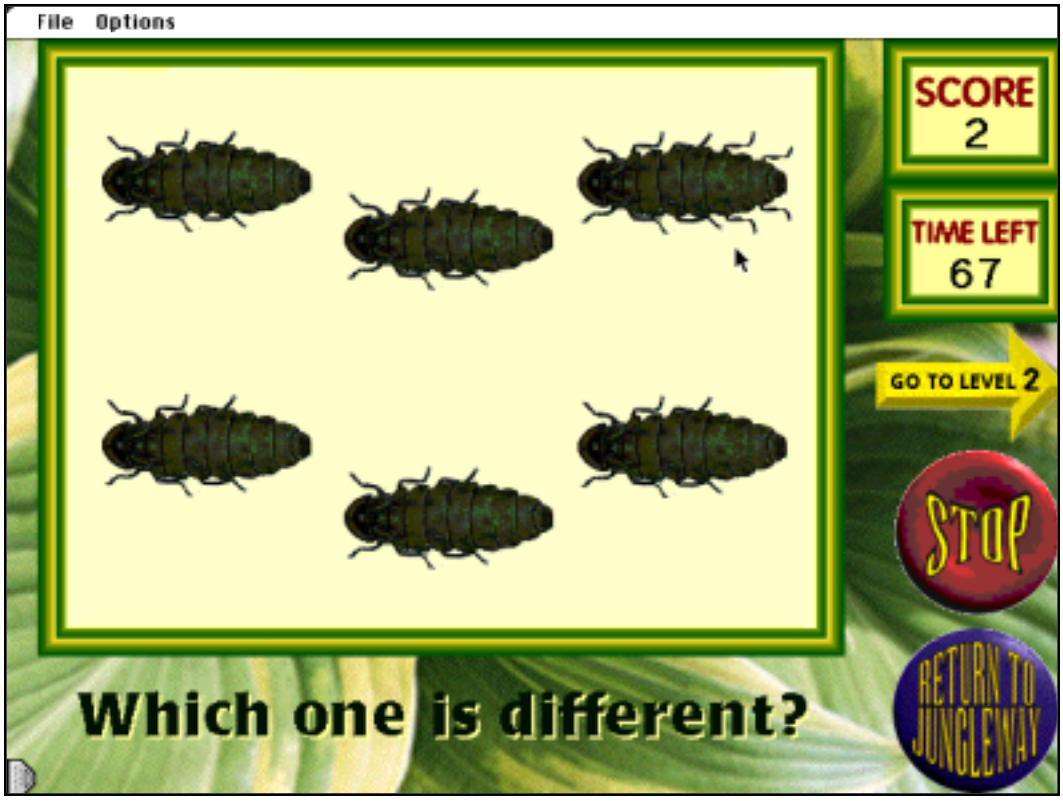
Bubble Fish

Math skills

- Apply a variety of estimation and mental math strategies to add and subtract two-digit numbers with and without regrouping.

Program icon

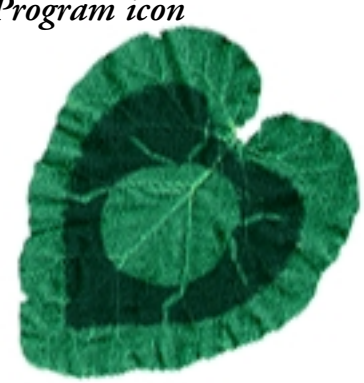
Bug Blast



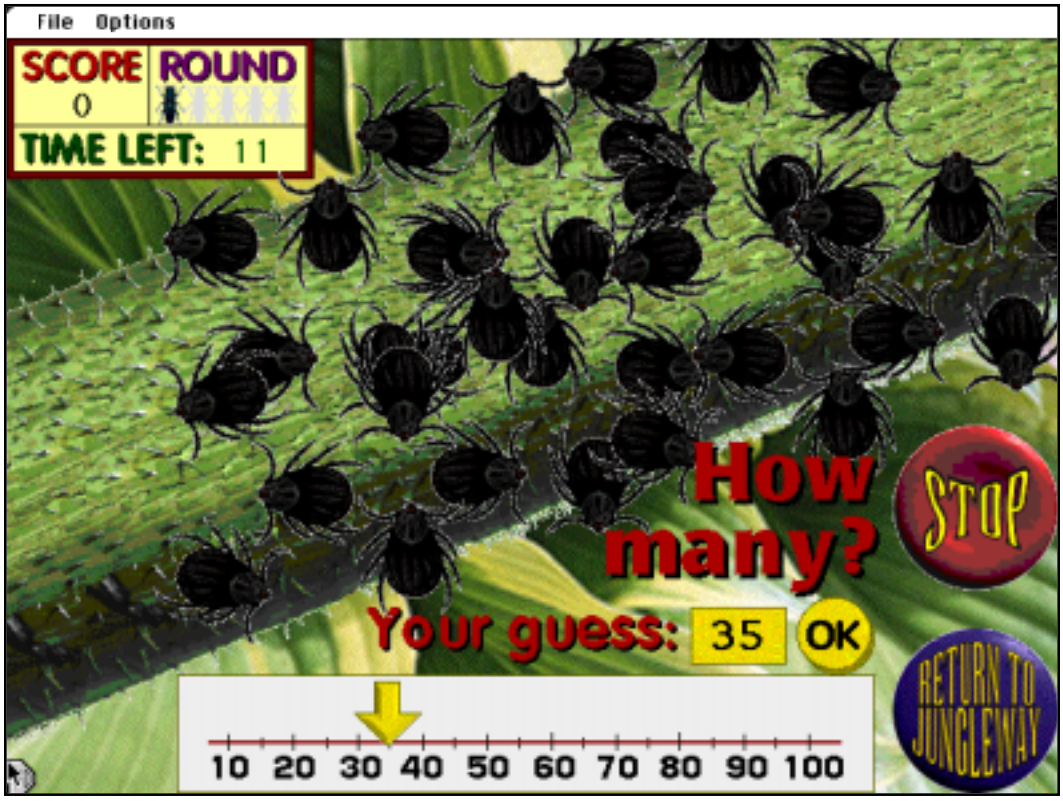
Math skills

- Identify the attributes of a set.
- Sort objects and shapes using one or two attributes.

Program icon



Bunch of Bugs

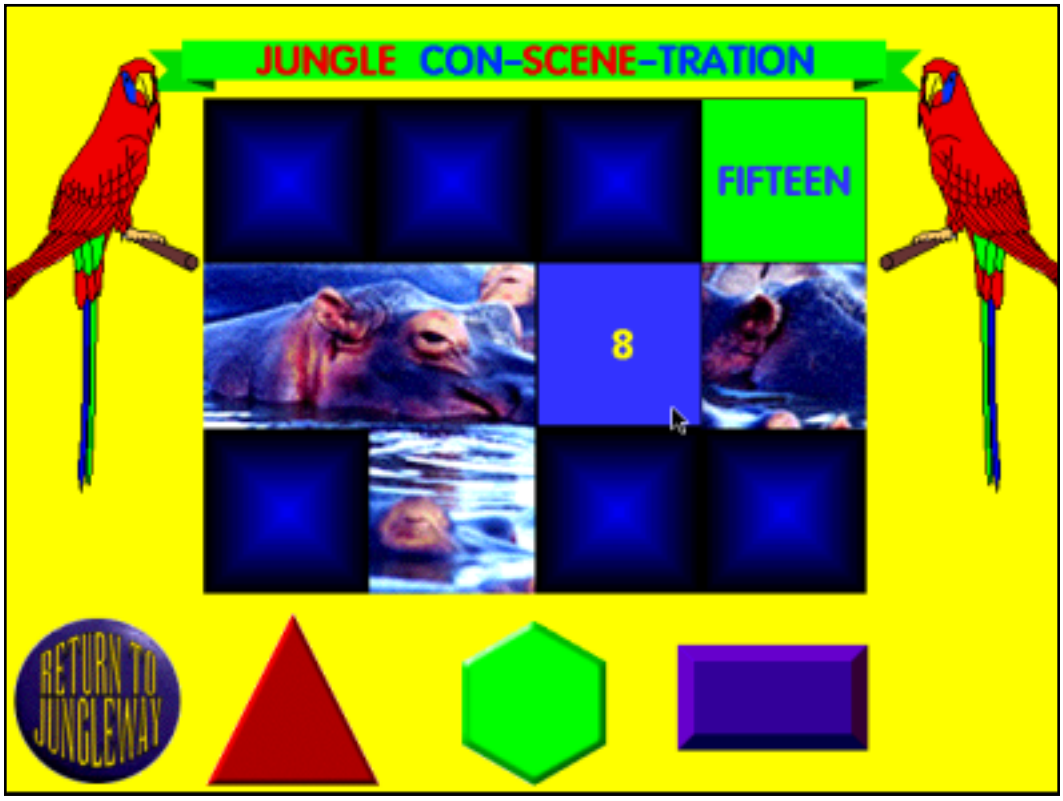


Math skills

- Estimate the number of objects in a set (0 to 100) and compare the estimate with the actual number.
- Locate a number on a number line.

Program icon

Con-Scene-Tration: Number words

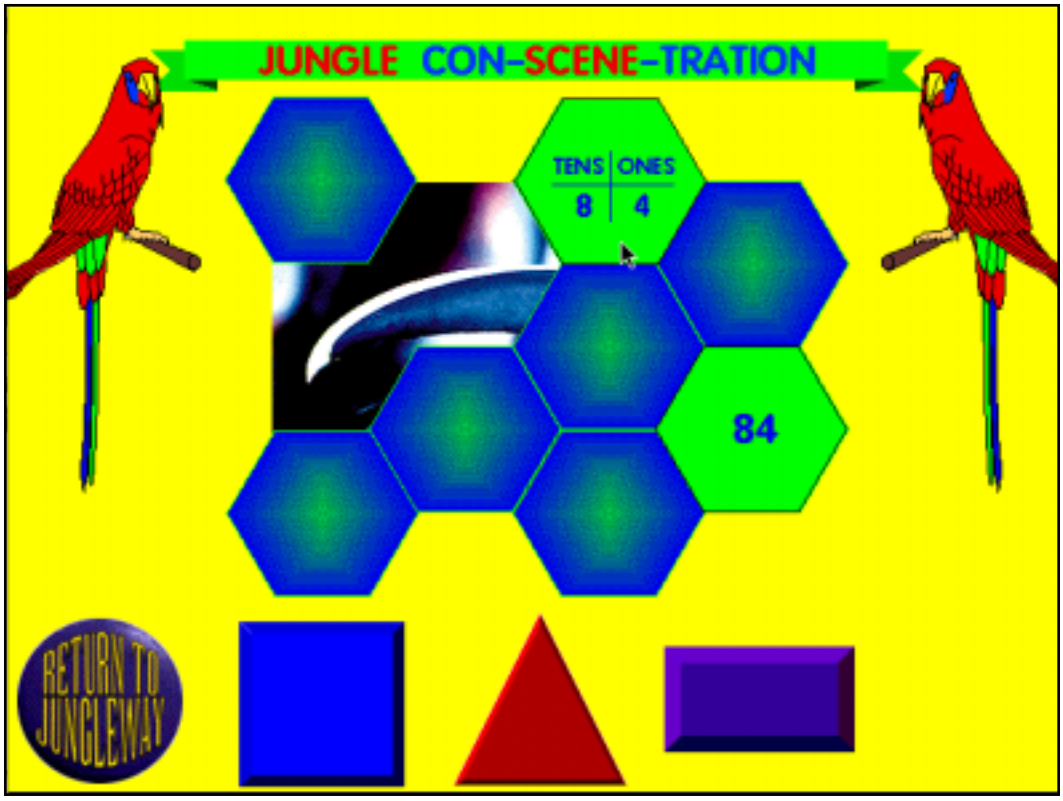


Math skills

- Read number words and numerals to twenty.

Program icon

Con-Scene-Tration: Number values

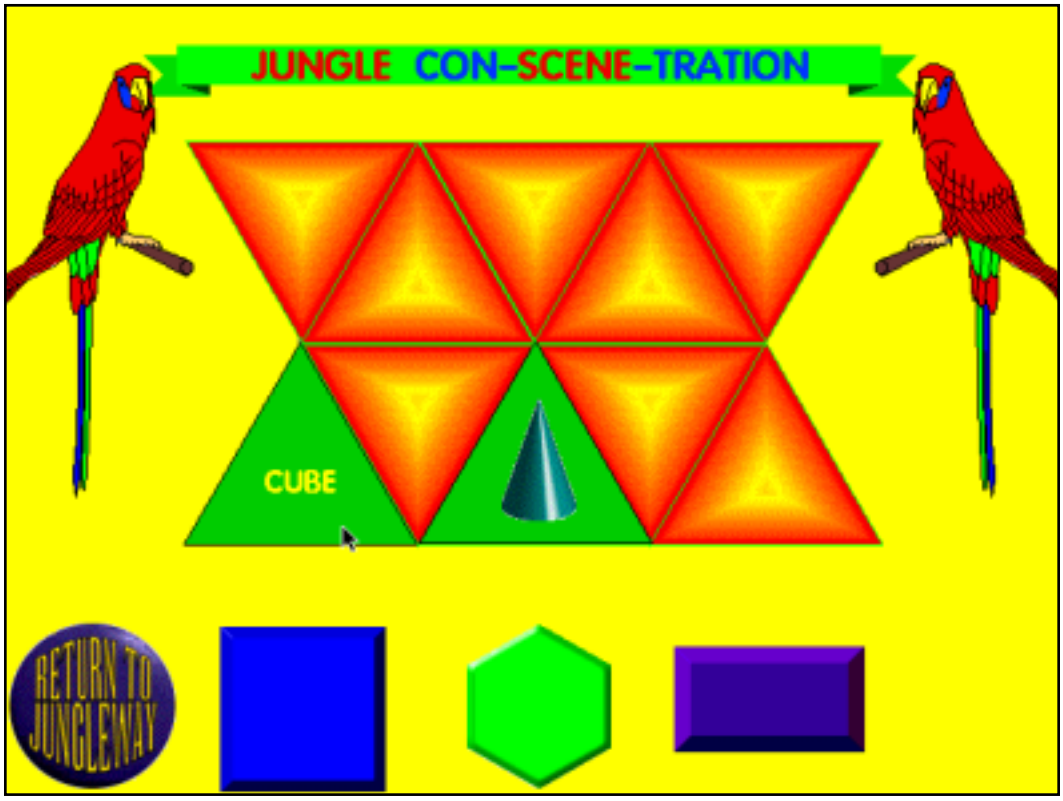


Math skills

- Represent and recognize numbers to 100 in a variety of ways.
- Demonstrate an understanding of place value concepts.

Program icon

Con-Scene-Tration: Shapes

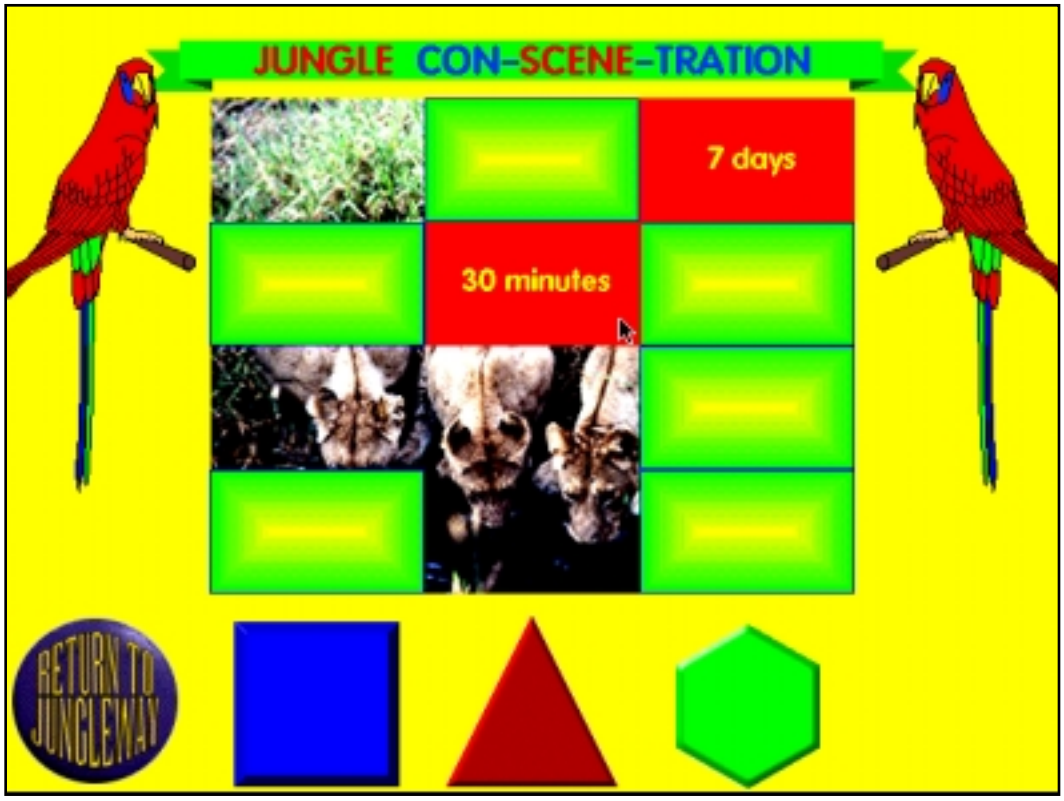


Math skills

- Identify and name three-dimensional geometric objects as cubes, spheres, cones, cylinders and pyramids.
- Identify and name two-dimensional geometric shapes as circles, squares and triangles.

Program icon

Con-Scene-Tration: Time

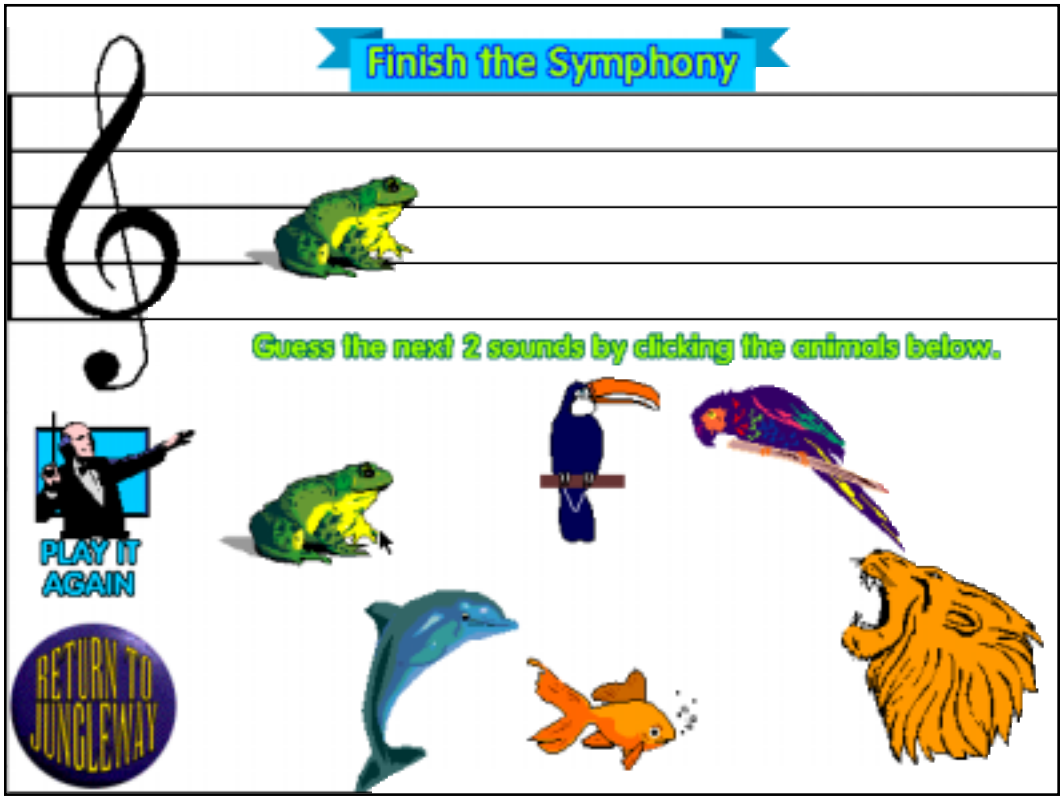


Math skills

- Relate minutes to hours, hours to days, days to weeks, days to months and months to years.

Program icon

Finish the Symphony

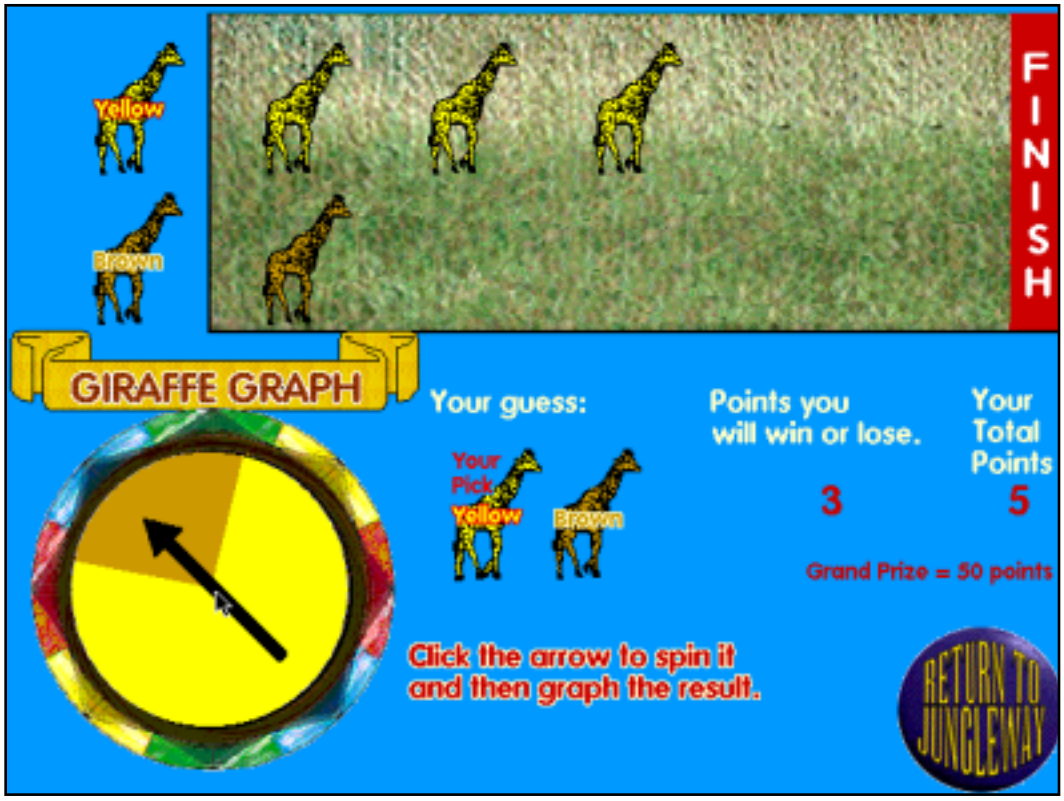


Math skills

- Identify and extend non-numerical patterns.
- Transfer patterns from one mode to another.

Program icon

Giraffe Graph

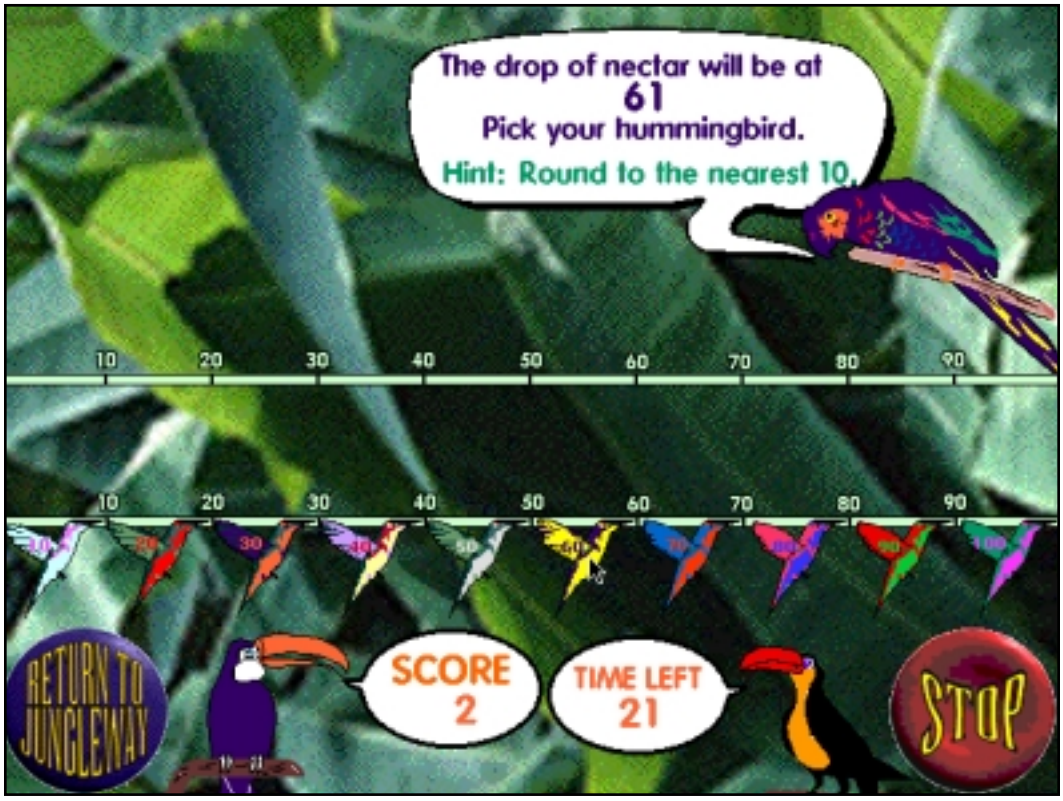


Math skills

- Make a prediction based on a simple probability experiment and observe the outcome.
- Read and indicate an understanding of a pictograph.

Program icon

Hummer Race

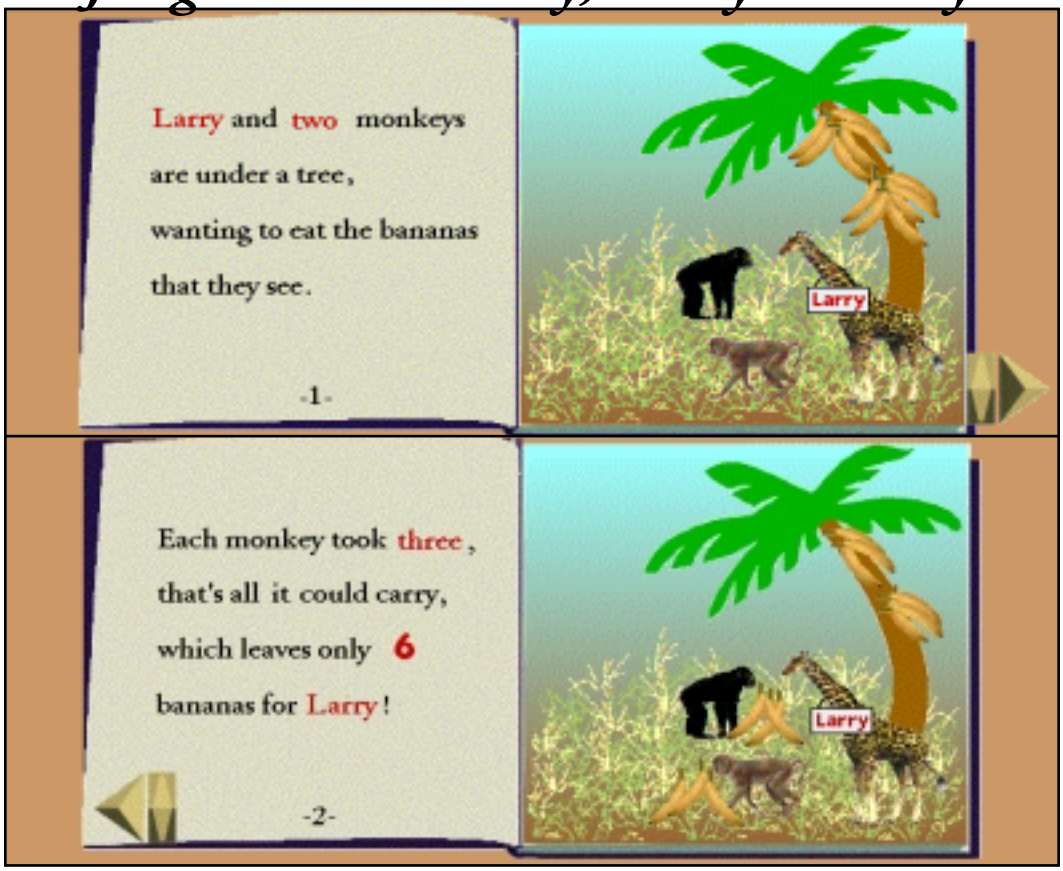


Math skills

- Round numbers to the nearest ten.

Program icon

Jungle Book: Harry, Larry & Mary

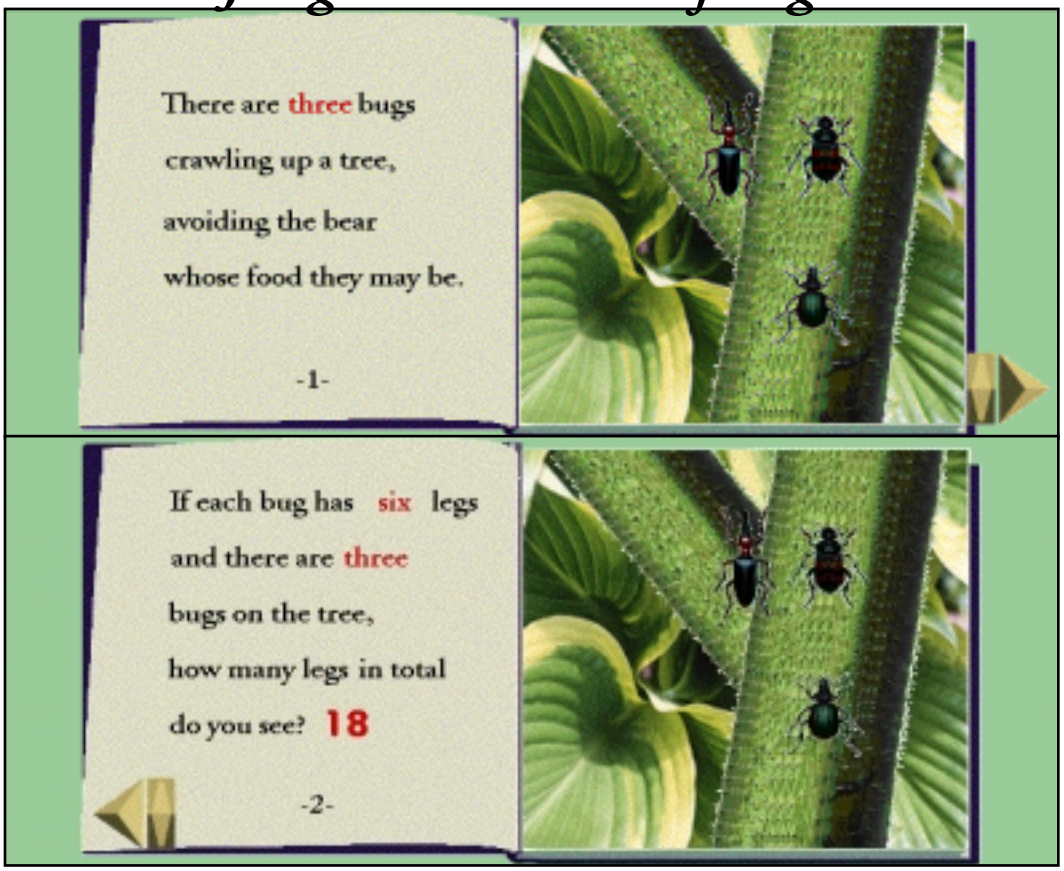


Math skills

- Use manipulatives to demonstrate the process of subtraction.
- Read number words.
- Solve a word problem by manipulating pictures to illustrate the problem.

Program icon

Jungle Book: Lots of Legs

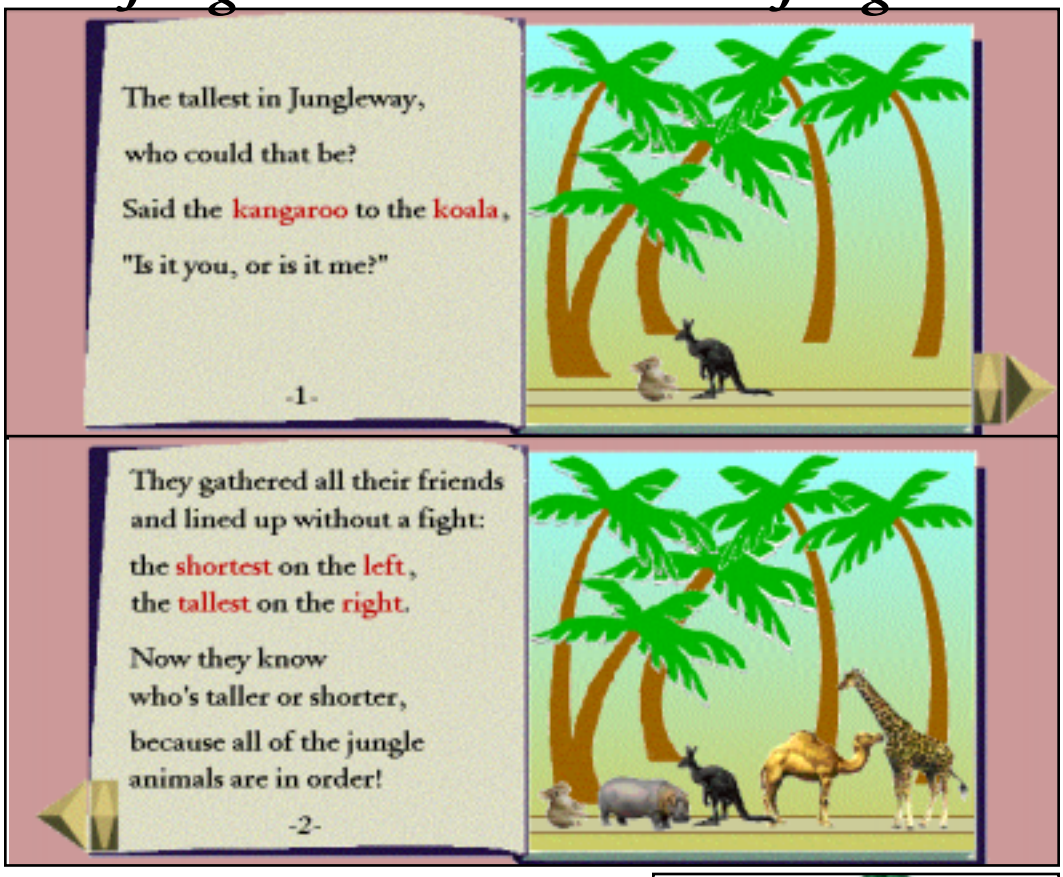


Math skills

- Use manipulatives to demonstrate the process of multiplication.
- Read number words.
- Sort objects using one attribute.
- Solve a word problem.

Program icon

Jungle Book: Order in the Jungle


The tallest in Jungleway,
who could that be?
Said the kangaroo to the koala,
"Is it you, or is it me?"
-1-
They gathered all their friends
and lined up without a fight:
the shortest on the left,
the tallest on the right.
Now they know
who's taller or shorter,
because all of the jungle
animals are in order!
-2-

Math skills

- Compare and order objects by height.
- Solve a word problem by manipulating pictures and objects to illustrate the problem.

Program icon

Jungle Book: Pete's Treats

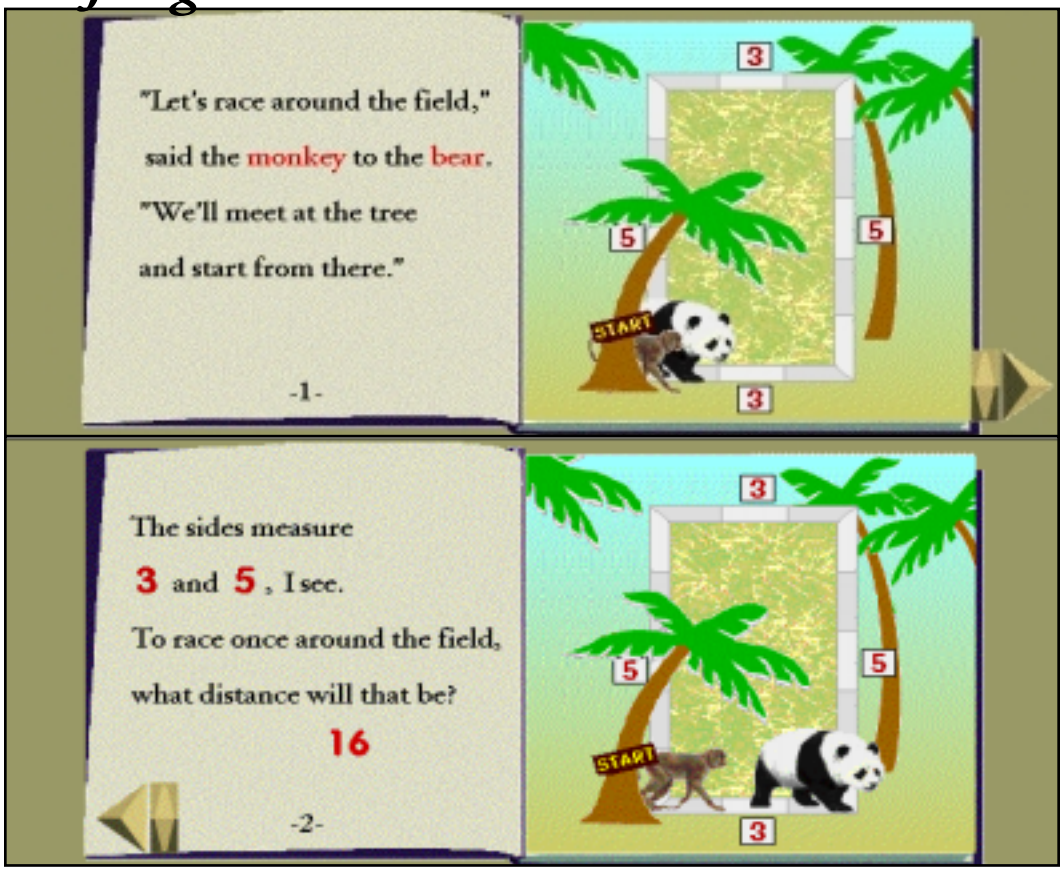
There was a koala named Pete, who had six juicy bugs to eat.
-1-
Pete
He gave one half away when Koko came to play. So she had 3 bugs as her treat!
-2-
Koko
Pete

Math skills

- Use manipulative to demonstrate the process of division as sharing
- Recognize halves, thirds and fourths as part of a set or a region.
- Solve a word problem and read number words.

Program icon

Jungle Book: Race Around the Field

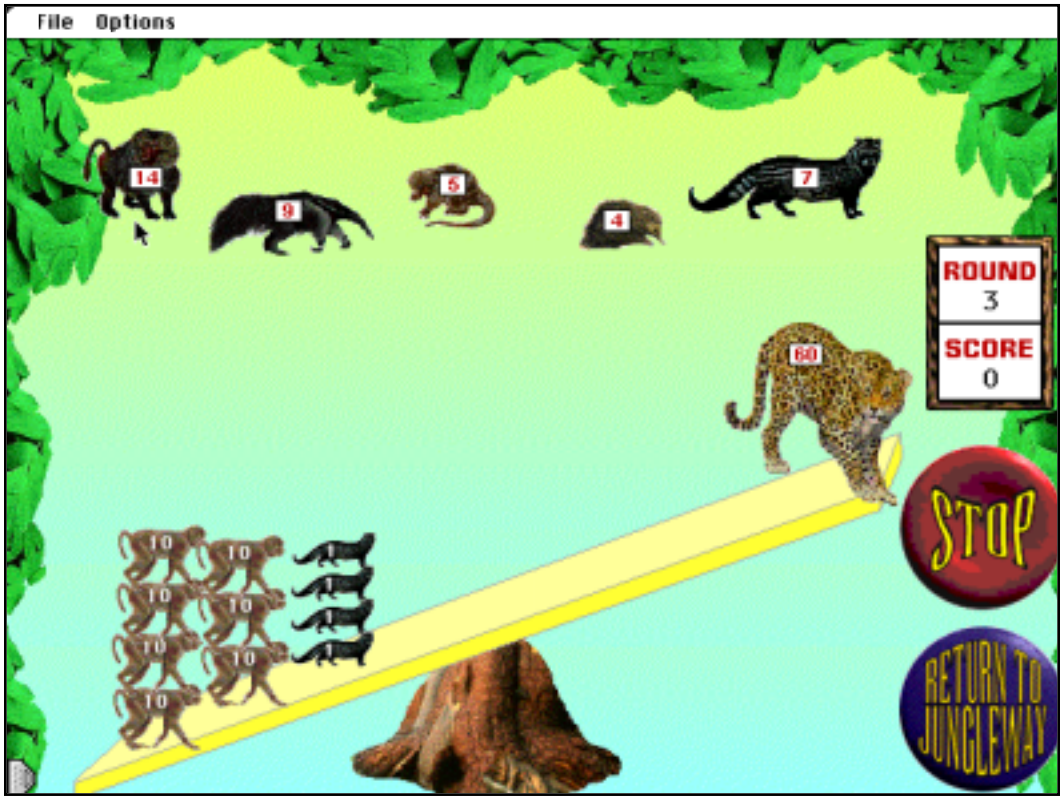


Math skills

- Calculate the perimeter of a rectangular area based on its dimensions.
- Solve a word problem.
- Read number words.

Program icon

Jungle Seesaw

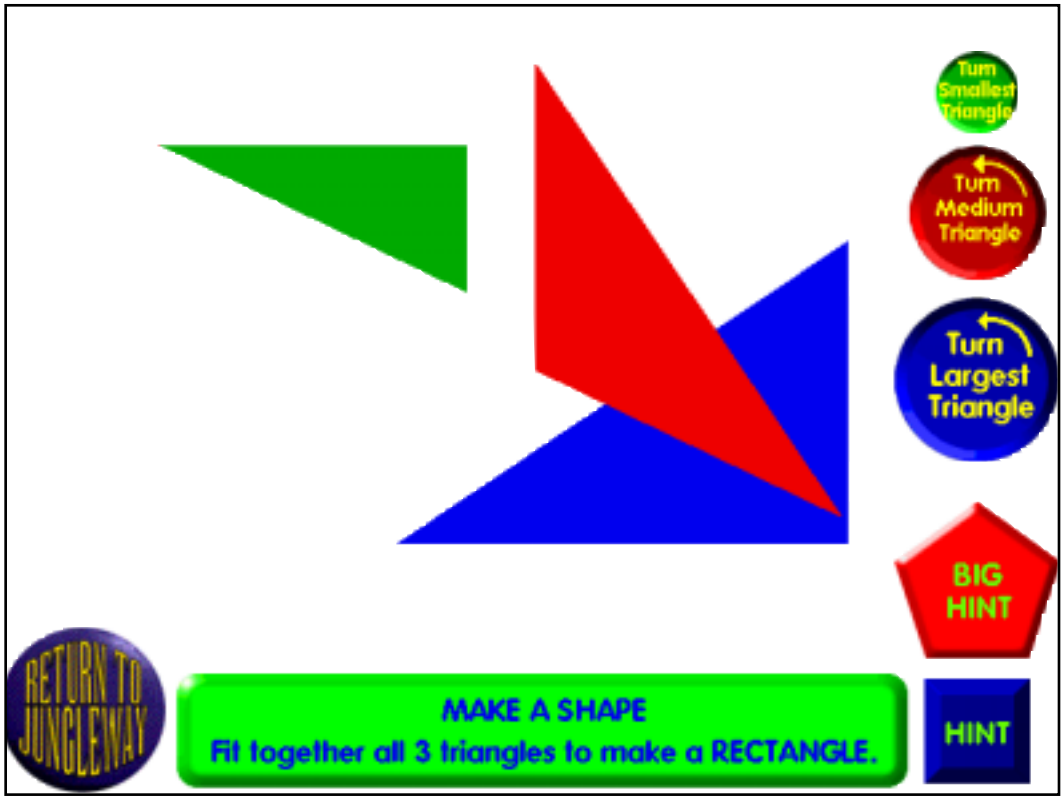


Math skills

- Represent and describe numbers to 100 in a variety of ways.
- Demonstrate concretely and pictorially, place value concepts to give meaning to numbers up to 100.
- Use manipulatives/concrete objects to demonstrate the process of addition and subtraction.

Program icon

Make a Shape

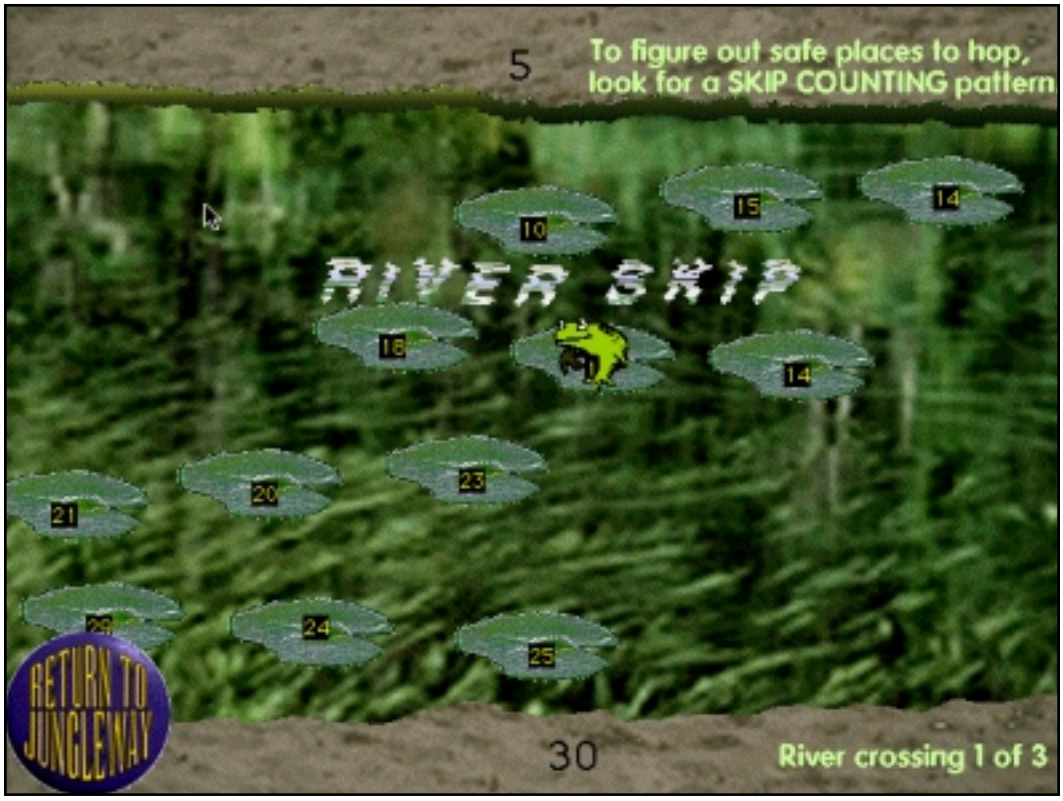


Math skills

- Build a two-dimensional shape by rearranging other two-dimensional shapes.
- Use turn transformations.
- Identify shapes in terms of relative areas.

Program icon

River Skip



Math skills

- Skip count to 1000 by 2's, 5's and 10's using multiples of 2, 5 and 10 as starting points.
- Identify a numeric pattern and use it to solve a problem.

Program icon

Time Tracks

JUNE
JULY
Move the animals to the bottom row, BUT months in each row CANNOT be out of order.
Pick an animal FIRST, then click a direction.
RETURN TO JUNGLEWAY
TIME TRACKS
Track 2 of 3
LEFT
RIGHT

Math skills

- Order days of the week and months of the year.
- Apply positional language (left, right).

Program icon

Troubleshooting – Macintosh

Problem	*Possible Cause*	*Possible Solution*
PERFORMANCE		
Program seems slow Program freezes	• not enough memory (at least 8 MB is required) • memory management confusion	• Don't run other programs while running *Jungleway* • Turn OFF background printing • Close all windows in the Finder • Through the Control Panel (Memory), turn OFF modern memory or 32-bit addressing & virtual memory
PRINTING		
Page doesn't print	• printer driver not installed or active • printer not properly connected • printer not selected under *Chooser*	• Refer to your printer and computer manuals
Printing is slow	• slow processor	• Don't use *Jungleway* while the printing is processing

Troubleshooting – Windows

Problem	*Possible Cause*	*Possible Solution*
PERFORMANCE		
Program seems slow Program freezes	• not enough memory (at least 8 MB is required)	• Don't run other programs while running *Jungleway*
General Protection Fault error	• memory management error	• Exit Windows and restart the computer • Run SCANDISK to detect and fix any memory location errors
Display is acting odd (fading, etc.) Some text on the screen seems too large	• monitor display may be set incorrectly	• Through Windows Setup, set your display to Super VGA 640 x 480 256 colors Choose small fonts instead of large fonts in display set up
PRINTING		
Page doesn't print	• printer driver not installed or active • printer not properly connected • printer not selected under *Print Manager*	• Refer to your printer and Windows manuals
Printing is slow	• slow processor	• Don't use *Jungleway* while the printing is processing